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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,877	07/11/2006	Dieter Urban	293249US0PCT	7723

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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SASTRI, SATYA B

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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11/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/585,877	<b>Applicant(s)</b> URBAN ET AL.	
	<b>Examiner</b> SATYA B. SASTRI	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/13/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to communication filed on 9/21/09. Claims 1-16 are now pending in the application.

2. Applicant's election, with traverse, of Group II invention (claims 10-13) in the reply filed on 9/21/09 is acknowledged. The traversal is on the ground(s) that (1) the burden is on the Office to provide reasons and/or examples to support any conclusions in regard to patentable distinction (MPEP §803) and (2) there would be no serious burden on the examiner if restriction is not required.

With regard to (1), applicant's argument is not found persuasive because as noted in paragraph 3 of the office action dated 8/21/09, the special feature that is common to Groups I to III is 3,4-dihydroxyphenyl group is disclosed in the prior art. For instance, the prior art to Pacetti et al. (US 7,563,454 B 1) specifically that discloses an ethylenically unsaturated monomer containing 3,4-dihydroxyphenyl group and a polymer comprising the same (working example 4). Since the common technical feature of claims belonging to Groups I to III fails to define a contribution over US 7,563,454 B1, the common technical feature does not amount to a special technical feature and hence there is lack of unity between the cited groups.

With regard to (2), it is noted that the Group III invention is specific to free radically polymerizable monomer having 3,4-dihydroxyphenyl group. However, the inventions of Groups I and II are directed to dispersion/solution of a polymer having 3,4-dihydroxyphenyl group and the method of their use and as such, encompass the universe of condensation and addition

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polymers having 3,4-dihydroxyphenyl groups. Thus, a serious search burden exists on the examiner to search the different groups of inventions. Further, the special technical feature of Group I invention, i.e. solution/dispersion of polymer having 3,4-dihydroxyphenyl groups is disclosed in the art to Pacetti et al. (US 7,563,454 B 1) for use as coating implantable medical devices and as such, fails to disclose method of using the composition (1) as a sealant or adhesive, (2) wherein storage is under oxygen-free environment prior to use, (3) wherein pH changes upon use and (4) wherein usage is under water, as presently claimed in Group II invention. Thus, inventions of Group I and II lack the common technical feature, i.e. a serious search burden exists on the examiner to search Group I and II inventions.

In light of above, the requirement is still deemed proper and is therefore made FINAL. Claims 1-9, 14-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Claim Objections***

3. Claim 1 is objected for the use of parenthesis in the body of the claim. Parenthesis may be deleted to integrate the phrase within parenthesis with the claim language.

Claim 12 is objected to because the phrase “method of using” is missing in the preamble of the claim.

### ***Claim Rejections - 35 USC § 102 and 103***

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Pacetti et al. (US 7,563,454 B1).

At the outset, given the dependency of claim 10 on claim 1, the limitations of composition as recited in claim 1 are incorporated into claim 10 for examination.

Pacetti et al. disclose coatings for implantable medical devices. The coating as exemplified in example 4 comprises an ethylenically unsaturated monomer containing 3,4-3dihydroxyphenyl units. 1 equivalent of the monomer is copolymerized with 19 equivalents of n-butylacrylate in a solvent and polymerized using benzoyl peroxide to yield a copolymer (XIII). A formulation comprising dried adduct (XIII) in a solvent blend of acetone and xylene is used to form primer coating layer on the stent.

In light of above, presently cited claim is anticipated by the prior art.

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7. Claims 10, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoshima (US 6,972,167 B2).

At the outset, given the dependency of claim 10 on claim 1, the limitations of composition as recited in claim 1 are incorporated into claim 10 for examination.

The prior art to Aoshima discloses a printing plate comprising a first layer that contains polymer insoluble in water and soluble in alkaline aqueous solution (ab.). Disclosed polymers soluble in alkaline aqueous solution include those with hydroxyaryl group in the side chain having the general formula (IX) –(XI) (col. 4-5). The number of hydroxyl groups, p, ranges from 1-4. Additionally, compound XI-4 explicitly discloses 3,4-dihydroxyphenyl groups.

The constitutional units (IX) –(XI) may be present in an amount of 5-100% by wt. of the polymer (col. 10, lines 61-65). Disclosed comonomers include (meth)acrylic esters, styrenes, acrylonitriles, vinyl esters and other monomers (col. 9, lines 61-66, col. 10). Disclosed solvents capable of being employed in preparing the polymers soluble in alkali include common organic solvents (col. 14, lines 31-43).

The prior art fails to disclose a dispersion or solution of a polymer of 3,4-dihydroxyphenyl groups as presently claimed.

It is noted that presently recited 3,4-dihydroxyphenyl group of claim 1 reads on disclosed formula XI-4. While a solution or dispersion comprising a polymer comprising XI-4 as constitutional unit is not explicitly disclosed, the working example for formation of first layer discloses the formation of a coating liquid (example in col. 38-40). Thus, it would have been obvious to one of ordinary skill in the art to prepare a coating liquid in the form of a solution or a

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disperison of polymer having XI-4 as constitutional monomeric units as thereby arrive at the present cited claim 10.

With regard to claim 12, the prior art discloses the polymer as being soluble in alkaline aqueous solution having a pH 10-13 during the developing of the planographic printing plate (col. 32, lines 6-15). With regard to claim 13, the limitation drawn to method of using of coating under water is met by Aoshima et al. reference that discloses developing the printing plate comprising the coating with alkaline aqueous solution.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Pacetti et al. (US 7,563,454 B1) or Aoshima (US 6,972,167 B2) in view of Wilson et al. (US2,685,515).

The discussions with regard to Pacetti et al. and Aoshima et al. above in paragraphs 7 and 8 are incorporated herein by reference.

The prior art fails to disclose the method of using the coating wherein it is stored under oxygen-free condition prior to use.

Secondary reference to Wilson et al. concerns the use of polyhydric alcohols. Further, the prior art discloses that polyhydric alcohols such as catechol or pyrogallol show serious disadvantages such as a strong tendency to form colored oxidation products upon contact with oxygen in the air (col. 2, lines 23-32). Given that the polymeric components of Pacetti et al. and Aoshima et al. include aromatic polyhydric alcohols having hydroxyl groups ortho to each other such as catechol and pyrogallol and given the teaching by Wilson et al. on their reactivity with oxygen, it would have been obvious to one of ordinary skill in the art to store the coating

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compositions of Pacetti et al. and Aoshima et al. under oxygen free environment prior to their use.

9. The X references cited in the International Search Report (JP10029292A and STN retrieved documents XP002324986 and XP002324987) are considered to be cumulative to or of less relevance compared to the prior art relied upon in the rejection above.

### *Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Mondays, Thursdays and Fridays, 7AM-5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Wu can be reached on 571-272-1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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/Satya B Sastri/

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